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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,987	11/03/2003	Wing-Kee Philip Cho	025444.1059-US02	5359

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EXAMINER	
SHEIKH, HUMERA N	

ART UNIT	PAPER NUMBER
1618	

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05/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/699,987	CHO, WING-KEE PHILIP	
	Examiner	Art Unit	
	Humera N. Sheikh	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *73,75,80,81,90,93-96,99,101,105-109 and 117-121* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *93-96,106-109,119 and 120* is/are allowed.

6)☒ Claim(s) *73,75,80,81,90,99,101,105,117,118 and 121* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of the Application

Receipt of the Request for Continued Examination (RCE) under 37 C.F.R. 1.114 and Applicant's Arguments/Remarks, all filed 03/13/08 is acknowledged.

Claims 73, 75, 80, 81, 90, 93-96, 99, 101, 105-109 and 117-121 are pending in this action. No amendments to the claims have been made herein. Claims 1-72, 74, 76-79, 82-89, 91, 92, 97, 98, 100, 102-104 and 110-116 have previously been cancelled. Claims 73, 75, 80, 81, 90, 99, 101, 105, 117, 118 and 121 are rejected. Claims 93-96, 106-109, 119 and 120 are allowed.

* * * * *

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 March 2008 has been entered.

* * * * *

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 73, 75, 80, 81, 90, 99, 101, 105, 117, 118 and 121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aberg *et al.* (hereafter "Aberg") (U.S. Pat. No. 5,731,319) in view of Hellberg *et al.* (hereafter "Hellberg") (U.S. Pat. No. 6,372,802).

Aberg *et al.* ('319) teach methods and compositions for the treatment of allergic rhinitis comprising descarboethoxyloratadine – "DCL" (desloratadine) that avoids adverse side effects associated with other non-sedating antihistamines (see Abstract); (col. 3, line 21 – col. 4, line 21). The descarboethoxyloratadine daily dose range is from about 0.1 mg to less than about 10 mg, administered orally in single or divided doses (col. 8, lines 30-41). (This range encompasses and meets Applicant's range of "about 2.5 mg" and "about 5 mg" desloratadine of instant claims 90 & 105). Suitable antioxidants (*i.e.*, organic acids) are disclosed at column 9, lines 12-30. The compositions can also include starches, sugars, microcrystalline cellulose, diluents, granulating agents, lubricants, binders, disintegrating agents and the like (col. 9, lines 31-39). Solid oral dosage forms such as tablets are preferred (col. 9, line 40 – col. 10, line 13).

With regards to the claim limitation of the "total amount of desloratadine degradation products being less than or equal to 2% by weight", it is the position of the Examiner that Aberg recognizes and teaches the use of the same acids as claimed by Applicant, which would also be fully effective in protecting desloratadine from the formation of degradation products; thus the total amount of degradation products of the prior art formulation would be minimal. Moreover, Applicant has not established criticality of the claimed amounts of degradation products, nor have any unexpected results been observed through the claimed amounts.

With respect to the claimed amounts of antioxidants, the Examiner points out that generally, differences in concentration will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller,* 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

With regards to the claimed dissolution of desloratadine, being "at least 80% desloratadine dissolved in a 0.1N HCL solution at 37°C in about 45 minutes", this dissolution rate limitation is not explicitly disclosed by Aberg. However, the determination of a suitable or effective rate of dissolution is within the level of one of ordinary skill in the art, obtained through routine or manipulative experimentation to obtain optimal results. Absent a showing of evidence to the contrary, the claimed dissolution rate, would be obvious to one of ordinary skill in the art given the explicit teachings of Aberg. Furthermore, no unexpected or superior results have been demonstrated through Applicant's claimed desloratadine dissolution rate.

Aberg do not teach edetate disodium.

Hellberg *et al.* ('802) teach methods and compositions for treating allergic diseases such as allergic rhinitis or sinusitis comprising disulfide derivatives (Abstract); (col. 3, lines 40-54). Conventional excipients that are added to the composition are chelating agents or stabilizers. Edetate disodium is disclosed as the suitable chelating agent or stabilizer (col. 3, lines 1-23). Active ingredients disclosed include antihistamines, such as desloratadine (col. 3, lines 24-39). Administration forms comprise oral dosage forms such as tablets (col. 2, lines 43-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate conventional chelating agents or stabilizing agents, such as edetate disodium as taught by Hellberg *et al.* within the formulations of Aberg *et al.* One of ordinary skill in the art would do so because Hellberg *et al.* explicitly teach the use of conventional excipients such as chelating or stabilizing agent and particularly teach edetate disodium as an effective and suitable chelating/stabilizing agent, useful for protecting against any degradation products. The expected result would be an enhanced dosage form and composition for combating allergic disorders and diseases.

Thus, given the teachings of Aberg and Hellberg, the instant invention, when taken as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Response to Arguments

Applicant's arguments filed 03/13/08 have been fully considered but they are not persuasive.

- **Rejection under 35 U.S.C. §103(a) over Aberg ('319) in view of Hellberg ('802):**

Applicant argued, "The cited references alone or in combination do not disclose, teach or suggest: (1) the total amount of desloratadine degradation products in the solid composition; (2) a specific dissolution rate for desloratadine; (3) a specified amount of antioxidant."

This argument has been considered but was not found persuasive. Admittedly, while the references do not expressly teach items (1)-(3) above, it remains the position of the Examiner that the distinctions argued above do not represent a patentable distinction over the art teachings. The references in combination are directed to formulations comprising the same active ingredient – desloratadine, used to treat the same problems and applied in the same manner as desired by Applicant. The difference is one of degree and not of kind. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best,* 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). In this instance, the prior in combination is directed to a formulation comprising the same elements as instantly claimed and thus would exhibit the same properties, i.e., low/reduced degradation products. "Products of identical chemical composition can not have mutually exclusive properties." A chemical

composition and its properties are inseparable. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Next, Applicant argued, "The FDA document states that it is critical to control the amount of degradation products…to ensure that the composition is safe and effective. The FDA notes that it is important to achieve a particular dissolution profile for the composition….when administered to a patient. The level of degradation products is closely tied to the amount of pharmaceutically acceptable antioxidant present therein (e.g., see paras. [0031] to [0033])."

These arguments were not persuasive. Applicant argues that the amount of degradation products is closely interrelated with the amount of antioxidant present. However, at least claims 73, 80, 90, 101, 105, 117, 118 and 73 are generic in terms of the specified amount of antioxidant present. Thus, Applicant's assertion that the "level of degradation products is closely tied to the amount of pharmaceutically acceptable antioxidant present therein" was not persuasive at least with respect to the generic claims noted above, which merely recite "desloratadine-protective amount of antioxidant" and do not state any particular amounts of antioxidant employed. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With regards to the dissolution rate claimed, the references do not teach the claimed dissolution rate. However, the determination of effective release rates is within the level of one of ordinary skill in the art. Moreover, it is well known that absorption of a drug is interrelated with resulting bioavailability.

Applicant argued, "There is no disclosure in Hellberg that excipients useful for mast cell stabilizer disulfide derivatives would be useful for an antihistamine, such as desloratadine. Furthermore, Hellberg discloses edetate disodium is an ophthalmically acceptable excipient, which is directed to liquid compositions; Applicant's claims are directed to solid compositions. Applicants submit that liquids and solids are non-analogous."

The Examiner respectfully disagrees. It is not essential that the secondary reference teach that the excipient (edetate disodium) is useful for desloratadine. The reference meets the instant claim limitations in that it is clearly suggestive of the inclusion of the excipient and teaches the beneficial effects that can be imparted via usage of the excipient, albeit for mast cell stabilizers. Applicant also argues the secondary reference's liquid formulation versus the solid of the instant invention. This was not deemed persuasive as the reference teaches that the formulations of the invention can be provided in oral dosage forms including tablets. See column 2, lines 43-58.

The rejections of record have been maintained.

* * * * *

Allowable Subject Matter

Claims 93-96, 106-109, 119 and 120 are allowed.

* * * * *

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Humera N. Sheikh whose telephone number is (571) 272-0604. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday during regular business hours. (Wednesdays - Telework).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Humera N. Sheikh/

Primary Examiner, Art Unit 1618

hns

May 12, 2008